

at Erasmus on the 27th. The average precipitation was 3.34, or about 0.50 below normal; the greatest monthly amount, 5.83, occurred at Sylvia, and the least, 1.73, at Silverlake. The weather was unfavorable for farm work, especially the seeding of winter wheat.—*H. C. Bates.*

Texas.—The mean temperature for the State, determined by comparison of 35 stations distributed throughout the State, was 3.4 below the normal. There was a general deficiency ranging from 1.0° to 6.2°, with the greatest over east Texas and the coast district. The highest was 98°, at Fort Ringgold on the 5th and at Fort McIntosh on the 7th, and the lowest, 13°, at Amarillo on the 22d. The average precipitation for the State, determined by comparison of 36 stations distributed throughout the State, was 0.19 below the normal. Nearly normal conditions prevailed over the panhandle. There was a slight deficiency over east, central, southwest, and west Texas, and the western portion of north Texas, and a deficiency of more than 1.00 over the eastern portion of north Texas, while there was a general excess over the coast district. The greatest monthly amount, 5.97, occurred at Jasper, while none fell at Menardville and Sanderson. Much wheat was sown during the month and the showers at the opening of the second decade were very beneficial for the crop. Early sown wheat suffered for rain at the opening of the month and some died, leaving a poor stand in localities over the western portion of the wheat belt.—*I. M. Chline.*

Utah.—The mean temperature was 35.4°; the highest was 82°, at Moab on the 7th, and the lowest, 8° below zero, at Woodruff on the 20th.

The average precipitation was slightly above normal; the greatest monthly amount, 3.44, occurred at Huntsville, and the least, trace, at Pahreah, St. George, and Tropic.—*J. H. Smith.*

Virginia.—The mean temperature was 44.6°, or about 2.5° below normal; the highest was 80°, at Wytheville on the 3d, and the lowest, 6°, at Burkes Garden on the 28th. The average precipitation was 2.59, or 0.11 above normal; the greatest monthly amount, 4.77, occurred at Spottsville, and the least, 1.50, at Salem.—*E. A. Evans.*

Washington.—The mean temperature was 39.8°, or 1.5° below normal; the highest was 75°, at Bridgeport on the 1st, and the lowest, 8°, at Waterville on the 16th. The average precipitation was 5.35, or 0.80 below normal; the greatest monthly amount, 15.60, occurred at Neah, and the least, trace, at Bridgeport.—*G. N. Salisbury.*

Wisconsin.—The mean temperature was 32.2°, or slightly above normal; the highest was 72°, at Knapp on the 3d, and the lowest, 34° below zero, at Osceola on the 24th. The average precipitation was 1.34, or 0.35 below normal; the greatest monthly amount, 2.45, occurred at Medford, and the least, 0.38, at Chilton.—*W. M. Wilson.*

Wyoming.—The mean temperature was 28.2°, or 3.2° below normal; the highest was 76°, at Fort Laramie on the 1st, and the lowest, 20° below zero, at Lovell on the 21st. The average precipitation was 0.83, or 0.07 above normal; the greatest monthly amount, 2.10, occurred at Evanston, and the least, 0.03, at Fort Washakie.—*W. S. Palmer.*

SPECIAL CONTRIBUTIONS.

NOTES BY THE EDITOR.

Owing to sickness these sections are omitted in order that the REVIEW may be published on time.

METEOROLOGICAL TABLES AND CHARTS.

By A. J. HENRY, Chief of Division of Records and Meteorological Data.

Table I gives, for about 130 Weather Bureau stations making two observations daily and for about 20 others making only one observation, the data ordinarily needed for climatological studies, viz, the monthly mean pressure, the monthly means and extremes of temperature, the average conditions as to moisture, cloudiness, movement of the wind, and the departures from normals in the case of pressure, temperature, and precipitation, the total depth of snowfall, and the mean wet-bulb temperatures. The altitudes of the instruments above ground are also given.

Table II gives, for about 2,700 stations occupied by voluntary observers, the highest maximum and the lowest minimum temperatures, the mean temperature deduced from the average of all the daily maxima and minima, or other readings, as indicated by the numeral following the name of the station; the total monthly precipitation, and the total depth in inches of any snow that may have fallen. When the spaces in the snow column are left blank it indicates that no snow has fallen, but when it is possible that there may have been snow of which no record has been made, that fact is indicated by leaders, thus (. . .).

Table III gives, for about 30 stations furnished by the Canadian Meteorological Service, Prof. R. F. Stupart, director, the means of pressure and temperature, total precipitation and depth of snowfall, and the respective departures from normal values, except in the case of snowfall.

Table IV gives, for 26 stations selected out of 113 that maintain continuous records, the mean hourly temperatures deduced from the Richard thermographs described and figured in the Report of the Chief of the Weather Bureau, 1891-92, p. 29.

Table V gives, for 26 stations selected out of 104 that maintain continuous records, the mean hourly pressures as auto-

matically registered by Richard barographs, except for Washington, D. C., where Foreman's barograph is in use. Both instruments are described in the Report of the Chief of the Weather Bureau, 1891-92, pp. 26 and 30.

Table VI gives, for about 130 stations, the arithmetical means of the hourly movements of the wind ending with the respective hours, as registered automatically by the Robinson anemometer, in conjunction with an electrical recording mechanism, described and illustrated in the Report of the Chief of the Weather Bureau, 1891-92, p. 19.

Table VII gives, for all stations that make observations at 8 a. m. and 8 p. m., the four component directions and the resultant directions based on these two observations only and without considering the velocity of the wind. The total movement for the whole month, as read from the dial of the Robinson anemometer, is given for each station in Table I. By adding the four components for the stations comprised in any geographical division the average resultant direction for that division can be obtained.

Table VIII gives the total number of stations in each State from which meteorological reports of any kind have been received, and the number of such stations reporting thunderstorms (T) and auroras (A) on each day of the current month.

Table IX gives, for about 70 stations, the average hourly sunshine (in percentages) as derived from the automatic records made by two essentially different types of instruments, designated, respectively, the thermometric recorder and the photographic recorder. The kind of instrument used at each station is indicated in the table by the letter T or P in the column following the name of the station.

Table X gives a record of rains whose intensity at some